

1116-51-2672      **Aaron Fenyes\*** (afeny@math.utexas.edu). *Deflating hyperbolic surfaces.*

Moving around on a hyperbolic surface feels very different, both geometrically and dynamically, from moving around on a flat one. However, there is a startling correspondence between hyperbolic and flat surfaces, which I think deserves to be more widely known. When a hyperbolic surface is equipped with some extra structure—a geodesic lamination of a certain kind—it can be “deflated” to a flat surface, which can later be “reinflated” to recover the original surface. This construction gives a very concrete way of looking at some classic geometric facts, like the correspondence between measured laminations and measured foliations. It can also be seen as a baby case of *abelianization*, a powerful technique for studying nonabelian character varieties by mapping them onto abelian ones. (Received September 22, 2015)